§ 73.21

In a positive direction:

 $M = MAX-C \times 100$

C

In a negative direction:

 $M = C\text{-}MIN \times 100$

-

Where:

M = Modulation level in percent.

MAX = Instantaneous maximum level of the modulated radio frequency envelope. MIN = Instantaneous minimum level of the modulated radio frequency envelope.

C = (Carrier) level of radio frequency envelope without modulation.

Plate modulation. The modulation produced by introduction of the modulating wave into the plate circuit of any tube in which the carrier frequency wave is present.

Primary service area. Means the service area of a broadcast station in which the groundwave is not subject to objectionable interference or objectionable fading

Proof of performance measurements or antenna proof of performance measurements. The measurements of field strengths made to determine the radiation pattern or characteristics of an AM directional antenna system.

Secondary service area. Means the service area of a broadcast station served by the skywave and not subject to objectionable interference and in which the signal is subject to intermittent variations in strength.

Stereophonic channel. The band of audio frequencies from 50 to 10,000 Hz containing the stereophonic information which modulates the radio frequency carrier.

Stereophonic crosstalk. An undesired signal occurring in the main channel from modulation of the stereophonic channel or that occurring in the stereophonic channel from modulation of the main channel.

Stereophonic pilot tone. An audio tone of fixed or variable frequency modulating the carrier during the transmission of stereophonic programs.

Stereophonic separation. The ratio of the electrical signal caused in the right (or left) stereophonic channel to the electrical signal caused in the left (or right) stereophonic channel by the transmission of only a right (or left) signal.

Sunrise and sunset. For each particular location and during any particular month, the time of sunrise and sunset as specified in the instrument of authorization (See § 73.1209).

White area. The area or population which does not receive interference-free primary service from an authorized AM station or does not receive a signal strength of at least 1 mV/m from an authorized FM station.

[47 FR 8587, Mar. 1, 1982, as amended at 47 FR 13164, Mar. 29, 1982; 47 FR 13812, Apr. 1, 1982; 50 FR 18821, May 2, 1985; 50 FR 47054, Nov. 14, 1985; 56 FR 64856, Dec. 12, 1991; 62 FR 51058, Sept. 30, 1997]

§ 73.21 Classes of AM broadcast channels and stations.

- (a) Clear channel. A clear channel is one on which stations are assigned to serve wide areas. These stations are protected from objectionable interference within their primary service areas and, depending on the class of station, their secondary service areas. Stations operating on these channels are classified as follows:
- (1) Class A station. A Class A station is an unlimited time station that operates on a clear channel and is designed to render primary and secondary service over an extended area and at relatively long distances from its transmitter. Its primary service area is protected from objectionable interference from other stations on the same and adjacent channels, and its secondary service area is protected from interference from other stations on the same channel. (See §73.182). The operating power shall not be less than 10 kW nor more than 50 kW. (Also see §73.25(a)).
- (2) Class B station. A Class B station is an unlimited time station which is designed to render service only over a primary service area. Class B stations are authorized to operate with a minimum power of 0.25 kW (or, if less than 0.25 kW, an equivalent RMS antenna field of at least 141 mV/m at 1 km) and a maximum power of 50 kW, or 10 kW for stations that are authorized to operate in the 1605–1705 kHz band.
- (3) Class D station. A Class D station operates either daytime, limited time

or unlimited time with nighttime power less than 0.25 kW and an equivalent RMS antenna field of less than 141 mV/m at one km. Class D stations shall operate with daytime powers not less than 0.25 kW nor more than 50 kW. Nighttime operations of Class D stations are not afforded protection and must protect all Class A and Class B operations during nighttime hours. New Class D stations that had not been previously licensed as Class B will not be authorized.

(b) Regional Channel. A regional channel is one on which Class B and Class D stations may operate and serve primarily a principal center of population and the rural area contiguous thereto.

Note: Until the North American Regional Broadcasting Agreement (NARBA) is terminated with respect to the Bahama Islands and the Dominican Republic, radiation toward those countries from a Class B station may not exceed the level that would be produced by an omnidirectional antenna with a transmitted power of 5 kW, or such lower level as will comply with NARBA requirements for protection of stations in the Bahama Islands and the Dominican Republic against objectionable interference.

- (c) Local channel. A local channel is one on which stations operate unlimited time and serve primarily a community and the suburban and rural areas immediately contiguous thereto.
- (1) Class C station. A Class C station is a station operating on a local channel and is designed to render service only over a primary service area that may be reduced as a consequence of interference in accordance with §73.182. The power shall not be less than 0.25 kW, nor more than 1 kW. Class C stations that are licensed to operate with 0.1 kW may continue to do so.

[56 FR 64856, Dec. 12, 1991]

§ 73.23 AM broadcast station applications affected by international agreements.

(a) Except as provided in paragraph (b) of this section, no application for an AM station will be accepted for filing if authorization of the facilities requested would be inconsistent with international commitments of the United States under treaties and other international agreements, arrange-

ments and understandings. (See list of such international instruments in §73.1650(b)). Any such application that is inadvertently accepted for filing will be dismissed.

- (b) AM applications that involve conflicts only with the North American Regional Broadcasting Agreement (NARBA), but that are in conformity with the remaining treaties and other international agreements listed in §73.1650(b) and with the other requirements of this part 73, will be granted subject to such modifications as the FCC may subsequently find appropriate, taking international considerations into account.
- (c) In the case of any application designated for hearing on issues other than those related to consistency with international relationships and as to which no final decision has been rendered, whenever action under this section becomes appropriate because of inconsistency with international relationships, the applicant involved shall, notwithstanding the provisions §§ 73.3522 and 73.3571, be permitted to amend its application to achieve consistency with such relationships. In such cases the provisions of §73.3605(c) will apply.
- (d) In some circumstances, special international considerations may require that the FCC, in acting on applications, follow procedures different from those established for general use. In such cases, affected applicants will be informed of the procedures to be followed.

[56 FR 64856, Dec. 12, 1991]

§ 73.24 Broadcast facilities; showing required.

An authorization for a new AM broadcast station or increase in facilities of an existing station will be issued only after a satisfactory showing has been made in regard to the following, among others:

- (a) That the proposed assignment will tend to effect a fair, efficient, and equitable distribution of radio service among the several states and communities.
- (b) That a proposed new station (or a proposed change in the facilities of an authorized station) complies with the